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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/008,435	11/13/2001	Markku Henriksson	796.415USW1	3030

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EXAMINER

SAMS, MATTHEW C

ART UNIT	PAPER NUMBER
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2643

DATE MAILED: 11/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/008,435	HENRIKSSON, MARKKU	
	Examiner	Art Unit	
	Matthew C. Sams	2643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-22 is/are rejected.
- 7) ☒ Claim(s) 16-18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11/13/2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>11/13/2001</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed 11/13/2001 has been considered.

Claim Objections

1. Claims 16-18 are objected to because of the following informalities:
"patent claim 14" is unclear because this is a reference to a patent which is not disclosed. A claim can be dependent upon an independent claim, but not another patent claim. Recommending the removal of "parent".

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 12-16 and 19-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Ahonen (US-5,574,981 herein after, Ahonen).

Regarding claim 12, Ahonen discloses a method of testing a transceiver that includes a test loop between the transmission branch and the reception branch, where the test loop includes transmission and reception coupling, a pass

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band filter (Fig. 1 [7]) and a reason for the signal to travel through the test loop. (Fig. 1 & 2, Col. 2 lines 45-60 and Col. 3 lines 19-31) Ahonen discloses that the transmitter will generate a test signal in the reception frequency, transmit the test signal and receive the test signal after passing through the test loop. (Col. 2 lines 65-68 and Col. 3 lines 1-5 and 32-37) The mention of a duplex filter is not necessary within the scope of the testing loop.

Regarding claim 13, Ahonen discloses a method of testing a transceiver where the transmission test signal is tuned to the reception frequency. Ahonen discloses that the receiver will be set to receive the test signal that was attenuated when it passed through the test loop filter. (Col. 2 lines 65-68, Col. 3 lines 1-5 & 32-43 and Fig. 1 [9])

Regarding claim 14, Ahonen discloses a method of testing a system comprising several radio transceivers. (Col. 4 lines 57-58 and Fig. 2) Ahonen discloses a combiner (Fig. 2 [22]), a pass band filter (Fig. 1 [7]), a divider (Fig. 2 [29]), a switch (Fig. 1 [S1 and Fig. 2 [S2]]), a transceiver coupler, a receiver coupler, a test loop with less attenuation and a test signal. (Fig. 1 & 2, Col. 2 lines 45-60 and Col. 3 lines 19-31) Ahonen discloses that the transmitter will generate a test signal in the reception frequency, transmit the test signal and receive the test signal after passing through the test loop. (Col. 2 lines 65-68 and Col. 3 lines 1-5 and 32-37) Ahonen discloses that using a duplex filter before the receiver section can separate signals. (Col. 1 lines 35-40)

Regarding claim 15, the limitations of the claim are rejected as the same reason set forth in claim 14.

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Regarding claim 16, Ahonen discloses multiple transmitters and receivers. (Col. 4 lines 57-58) It is well known in the art that if multiple copies of the same transmission are sent to identical receivers and one receiver has a different result, it is defective.

Regarding claim 19, Ahonen discloses a method of testing a transceiver that includes a test loop between the transmission branch and the reception branch, where the test loop includes transmission and reception coupling, a pass band filter (Fig. 1 [7]), a signal generator and a reason for the signal to travel through the test loop. (Fig. 1 & 2, Col. 2 lines 45-60 and Col. 3 lines 19-31) Ahonen discloses that the transmitter will generate a test signal in the reception frequency, transmit the test signal and receive the test signal after passing through the test loop. (Col. 2 lines 65-68 and Col. 3 lines 1-5 and 32-37) Ahonen discloses that when a switch opens in the test loop path, the test signal will not go to the receiving branch, but rather to the antenna. (Fig. 1 and Col. 3 lines 37-51)

Regarding claim 20, the limitations of the claim are rejected as the same reason set forth in claim 19.

Regarding claim 21, Ahonen discloses a test frequency that is outside the frequency band allocated for traffic. (Col. 2 lines 20-26)

Regarding claim 22, the limitations of the claim are rejected as the same reason set forth in claim 19. The location of the test filter is disregarded because the function of the system is still the same.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahonen in further view of Tamii et al. (US-4,949,090 herein after, Tamii).

Regarding claim 17, Ahonen discloses all the limitations of claim 14. Ahonen differs from the claimed invention in that he failed to disclose the sending of the test signal one by one. However, Tamii discloses a testing system that allows for the modification of sending the test signal one by one. (Col. 4 lines 65-68 and Col. 5 lines 1-2) At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use the measuring techniques of Ahonen with the flexibility of Tamii. One of ordinary skill in the art would have been motivated to do this since it makes it possible to accurately diagnose the problem. (Col. 1 lines 43-49)

Regarding claim 18, the limitations of the claim are rejected as the same reason set forth in claim 17.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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US-6,505,041 to Borgstrand regarding a radio system that sends test signals outside of the frequency band of the receiver.

US-6,208,621 to Ducaroir et al. regarding the testing of two transceivers.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew C. Sams whose telephone number is (703)305-0810. The examiner can normally be reached on M-F 7:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz can be reached on (703)305-4708. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MCS
10/28/2004


GEORGE ENG
PRIMARY EXAMINER